

**RAILROAD COMMISSION OF TEXAS**  
**OIL AND GAS DIVISION**

Form W-12  
DBC1297 (1-1-71)

<b>INCLINATION REPORT</b> (One Copy Must Be Filed With Each Completion Report.)	
1. FIELD NAME (as per RRC Records or Wildcat) <b>HALEY (LWR. WOLFCAMP-PENN CONS.)</b>	2. LEASE NAME <b>UNIVERSITY 20-21</b>
3. OPERATOR <b>CHESAPEAKE OPERATING, INC.</b>	
4. ADDRESS <b>2010 RANKIN HIGHWAY MIDLAND, TX 79701</b>	
5. LOCATION (Section, Block, and Survey) <b>SEC. 21, BLK. 20, UL SURVEY</b>	
6. RRC District <b>08</b>	
7. RRC Lease Number. (Oil completions only)	
8. Well Number <b>1</b>	
9. RRC Identification Number (Gas completions only)	
10. County <b>LOVING</b>	

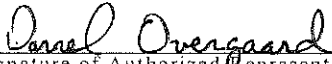
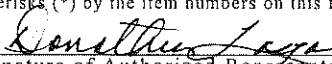
**RECORD OF INCLINATION**

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
12500	125.00	1.0	1.75	12.79	236.99
13042	5.42	.25	0.44	2.38	239.36
13517	4.75	.9	1.57	7.46	246.82
13851	3.34	1.0	1.75	5.84	252.65
14200	3.49	.8	1.40	4.89	257.52
14267	0.67	1.0	1.75	1.17	258.69
14500	2.33	.8	1.40	3.26	261.94
15010	5.10	.8	1.40	7.14	269.06
15443	4.33	1.8	3.14	13.60	282.66
15530	0.87	2.10	3.66	3.18	285.85
15588	0.58	2.60	4.54	2.63	288.48
15635	0.47	1.9	3.32	1.56	290.04
15710	0.75	2.3	4.01	3.01	293.05
15845	1.35	1.9	3.32	4.48	297.53
15945	1.00	1.5	2.62	2.62	300.14
16264	3.19	1.2	2.09	6.67	306.82

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form? ☒ yes ☐ no
18. Accumulative total displacement of well bore at total depth of \_\_\_\_\_ feet = \_\_\_\_\_ feet.
- \*19. Inclination measurements were made in - ☐ Tubing ☐ Casing ☐ Open hole ☐ Drill Pipe
20. Distance from surface location of well to the nearest lease line \_\_\_\_\_ **1320** feet.
21. Minimum distance to lease line as prescribed by field rules \_\_\_\_\_ **1320** feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? **NO**

(If the answer to the above question is "yes", attach written explanation of the circumstances.)

INCLINATION DATA CERTIFICATION	OPERATOR CERTIFICATION
<p>I declare under penalties prescribed in Sec. 91-143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.</p> <p> Signature of Authorized Representative</p> <p><b>DARREL OVERGAARD, SR. DRILLING ENGINEER</b> Name of Person and Title (type or print)</p> <p><b>CHESAPEAKE OPERATING, INC.</b> Name of Company</p> <p>Telephone: <b>(405) 767-4118</b> Area Code</p>	<p>I declare under penalties prescribed in Sec. 91-143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.</p> <p> Signature of Authorized Representative</p> <p><b>DOROTHEA LOGAN</b> Name of Person and Title (type or print)</p> <p><b>REGULATORY ANALYST</b> Operator</p> <p>Telephone: <b>(432) 687-2992</b> Area Code</p>

Railroad Commission Use Only:

Approved By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

\* Designates items certified by company that conducted the inclination surveys.

## RECORD OF INCLINATION (Continued from reverse side)

[illegible]

If additional space is needed, attach separate sheet and check here. ☐

REMARKS:

- INSTRUCTIONS -

An inclination survey made by persons or concerns approved by the Commission shall be filed on a form prescribed by the Commission for each well drilled or deepened with rotary tools or when, as a result of any operation, the course of the well is changed. No inclination survey is required on wells that are drilled and completed as dry holes that are plugged and abandoned. (Inclination surveys are required on re-entry of abandoned wells.) Inclination surveys must be made in accordance with the provisions of Statewide Rule 11.

This report shall be filed in the District Office of the Commission for the district in which the well is drilled, by attaching one copy to each appropriate completion for the well. (except Plugging Report)

The Commission may require the submittal of the original charts, graphs, or discs, resulting from the surveys.

ELIZABETH A. JONES, CHAIRMAN  
MICHAEL L. WILLIAMS, COMMISSIONER  
VICTOR G. CARRILLO, COMMISSIONER



TOMMIE SEITZ  
DIRECTOR, OIL AND GAS DIVISION  
JOHN JAMES TINTERA P.G.  
ASSISTANT DIRECTOR, TECHNICAL PERMITTING

# RAILROAD COMMISSION OF TEXAS

## OIL AND GAS DIVISION

June 26, 2007

CHESAPEAKE OPERATING INC  
ATTN DOROTHEA LOGAN  
2010 RANKIN HWY  
MIDLAND TX 79701

Re: University 20-21 Lease  
Well No. 1  
Haley (Lwr. Wolfcamp-Penn Cons.) Fld  
Loving County, Texas  
API No. 42-301-31331

Dear Operator:

The Commission has received completion papers on the referenced well. Please refer to Statewide Rule 11(b)(1)(A) which states in part:

The first shot point of such inclination survey shall be made at a depth not greater than 500 feet below the surface of the ground, and succeeding shot points shall be made either at 500-foot intervals or at the nearest drill bit change thereto, but not to exceed 1,000 feet apart.

The inclination report (Form W-12) submitted by Patterson-UTI Drilling Company LP, LLLP and certified by both Linda Robinson and yourself had its final shot point exceeding 1000'. An amended Form W-12 is necessary for the well to be in compliance with Statewide Rule 11 and be placed on schedule. If the additional information is not available and it is not reasonable to resurvey the well, the operator may request an exception to Statewide Rule 11 accompanied by a detailed explanation of the circumstances for this well. Please comply with this request within 30 days of the date of this letter.

If you have any questions, please call me at (512) 463-6701.

Yours truly,

A handwritten signature in dark ink, appearing to read "Cathy Garrison", is written over a horizontal line.

Cathy J. Garrison  
Permitting Services

cc: Dist. Ofc. 08-- Midland  
Sandi McEnelly, Analyst  
File